

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Docket No: Q88710

Yoshinori KOMATSU, et al.

Appln. No.: 10/539,445 Group Art Unit: 1794

Confirmation No.: 6821 Examiner: Brent T. O'Hern

Filed: June 20, 2005

For: MOUSSE-TYPE SPREAD AND MOUSSE-TYPE EDIBLE OIL

DECLARATION UNDER 37 C.F.R. § 1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Shigeru TAMAI, hereby declare and state:

THAT I am a citizen of Japan;

THAT I received a Master's degree from Tohoku University, Graduate School of Agricultural Science, Faculty of Agriculture in March 1977;

THAT I have been employed by Meiji Dairies Corporation since 1977;

THAT I have been working at the Research and Development Center, Division of Research and Development, Cream and Ice Cream Department, and have engaged in the research and development of mainly ice cream, cream and margarine, since April 1, 2010;

THAT my current position is that of General Manager;

THAT I have read the Non Final Office Action dated June 30, 2010, and the references cited therein;

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THAT no specific valve, gas propellant, or container is required to perform the subject matter defined in claim 1 other than those explained in the specification of the instant application; and

THAT I believe that the present invention is distinguishable and unobvious over the prior art inventions, at least for the following reasons.

Description of the Presently Claimed Invention

As described at paragraphs [0007] and [0008] of the publication of the instant application (Patent Application Publication No. 2006-0078659), the presently claimed invention requires the following: (i) the composition is sealed with the gas propellant in the container (see, for e.g., paragraph [0007]); and (ii) the gas propellant is dissolved to such an extent that the foaming occurs at the time of jetting (see, for e.g., paragraph [0008]).

Thus, the following principle is utilized with regard to the foaming of the emulsion of the presently claimed invention:

a composition in which a gas is (at least) partially dissolved under reduced pressure is jetted, then a propellant is vaporized by reducing the pressure from the high pressure in the container to atmospheric pressure to cause the volume expansion.

Thus, at least, special device and ingenuity are not required in the bulb, and any aerosol container and any type of valve adapted for an aerosol container can be used as long as the container is inactive to the composition and propellant and does not have pressure resistant structure, i.e. a container which is generally broadly used can be used in the presently claimed invention. In addition, any kind of propellant and any gas pressure can be used as long as the pressure is enough to discharge the content, and the composition in which the propellant is (at

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least) partially dissolved is jetted to cause foaming by reducing the pressure to atmospheric pressure. For example, as described at page 10, lines 3-20 of the published application, the requirements of the present invention can be satisfied by using the suitably combined standards of solubility of the composition of the gas to be used.

The Invention Described in Gupta

In the container of Gupta, the gas propellant and the composition are separated by a partition. Thus, the propellant simply functions as a power source for pushing out the composition from the container. Since the gas and the content are separated by the partition, the gas is not dissolved at all in the contents in the container. Thus, upon jetting, the gas is not vaporized in the composition, and foam can never form.

The composition and container of Gupta Would Not Result in the Jetting of Mousse-Like Foam

Various containers are used depending on the purpose or function of the contents as well as the form of the product dispensed from the container. For example, in the case of soft margarine, mayonnaise and the like, a plastic tube with a nozzle may be used. And, if the shape of the nozzle is circular, the content is pushed out in a form of a cord with the circular cross-section, and if the shape of the nozzle is star-shape, the content is pushed out in a form of a cord with the star-shape cross-section.

For example, JP 5-132010¹ describes a container in which an elastic expansion bag is included in an inner part thereof. However, in this container, the content is pushed out by the

¹ A copy of JP 5-132010 is enclosed herewith for the Examiner's convenience.

contradictive power of the elastic expansion bag unlike the container of Gupta, in which the partition is pushed by the gas force. At paragraph [0015], JP 5-132010 describes that a butter or the like is applied on a bread or the like without using a spoon. In this document, application of the content is described, but foaming of the content is never described.

The above explanation is further illustrated with simple examples as follows.

When toothpaste or mayonnaise packed in a tube is pushed out, the same principle is utilized as discussed in the following examples:

- the outer side of the tube is pressed by hand to push out the content from the tube; and
- the partition between two compartments is pushed up by the gas pressure in one compartment to push out the content from a second compartment of the container, as in the invention disclosed in Gupta.

When a toothpaste, mayonnaise, ketchup and the like are packed in a tube and dispensed from the tube, it is obvious that foaming of the content does not occur, but instead, the content is pushed out in a form of a cord and the like.

On the other hand, in a pump aerosol/sprayer equipped with a piston and a nozzle, the piston is operated by a handle and a liquid is jetted from the nozzle. Since a spiral incision is made in the nozzle, the liquid is jetted in a form of a mist when pressure is applied. Examples of the liquid include water and oil. In the case of the liquid having a low viscosity (e.g. water and salad oil), the liquid can be jetted in a form of a mist sufficiently by hand. In the case of the liquid having a high viscosity, the liquid can be jetted in a form of a mist by applying high pressure made by an engine or the like. Even if an aerosol sprayer is used, the liquid is not jetted in a form of a mist if handle operation is performed slowly. Moreover, if the screw of the nozzle

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is loosened to increase the ratio of aperture, the liquid is not discharged in a form of a mist, but is discharged in a form of a line.

The container of Gupta employs the principle of the aerosol/sprayer explained above. In the aerosol/sprayer, the liquid itself is pressurized by piston or pump to be discharged from the nozzle, and thus, the liquid is discharged in the form of a mist or a line depending on the size of the aperture of the nozzle. In the container of Gupta which has partitioned and separate spaces for each of the contents and gas, and thus the gas is not dissolved in the contents, the partition is pushed by the gas to eject the contents, and foam or mousse can never form.

In view of the above, since a composition and a propellant are separately present in the Gupta container, the composition is jetted in a form of a cord or a mist. If the content included in the above aerosol/sprayer or tube is required to be jetted in the form of a mousse from the tube or the aerosol sprayer, it is necessary to incorporate the content that is already in the form of a mousse into the aerosol/sprayer or tube. However, Gupta does not disclose a container containing a content in mousse form. Also, if Gupta contains a mousse-type content, such is different from the claimed subject matter of claim 1, which requires the container contains an emulsion and gas which is partially dissolved in the emulsion.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

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Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: November /26/2010

Shigeru Tamai
Shigeru TAMAI